

Impacts Case Study - Hawaii
(comparison of effect of benchmark and treatment)

Conservation Effects Worksheet

Orchard - Macadamia
(land use and crop)

Resource Setting: Pahala, Hawaii

Shallow soils over pahohoe.

Moderate to steep slopes.

Highly erodible.

Conservation Treatment:

Field Windbreaks (392)

Diversion (362)

Terrace system (600)

Grassed Waterways (412)

Irrigation System (441)

Permanent Vegetative Cover (340)

Mulching (484)

Filter Strips (393)

Pest Management (595)

Nutrient Management (590)

Sediment Basin (350)

Resource Problems Before Treatment:

Sheet and rill erosion

Gully erosion

Nutrient and pesticide in runoff

No vegetative cover within orchard

Orchard trees planted in waterways

Close tree spacing (orchard)

Terraces not maintained

IMPACTS	DECISIONMAKERS EVALUATION	
	(+ / -)	Comment
Terraces every 200 feet	-	High construction cost
• Reduces soil loss by 50%	-	High maintenance
	+	Not too much left
Establish Waterways	+	Less infield damage
• Removes trees within waterway	-	High cost of tree removal
• Eliminate gully	-	Less trees/acre
• Wildlife Habitat	+	Less pukas
	+	KESS
Plant vegetative cover	-	Less harvest efficiency
• Reduce soil loss by 50%	+	
• Increase spacing - remove every other row	-	High cost of tree removal
• Wildlife habitat	-	Lower sales value
	+	
Biological Control	+	Reduce pesticide runoff
	-	Research cost high
	+	Support bugs for a bug
Mowing	+	Reduce nutrient runoff
	-	Labor Intensive
	-	Equipment cost high
Comments: Evaluations made by the decision maker does not always reflect the views of SCS.		